

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Amended) A plasma treatment equipment having a chamber for performing plasma treatment, the plasma treatment equipment comprising:
a plasma excitation electrode to which a power for plasma excitation is supplied, the plasma excitation electrode being provided in the chamber; and
a susceptor electrode that is opposed to the plasma excitation electrode provided in the chamber, the susceptor electrode having the same DC potential as that of a chamber wall of the chamber, the susceptor electrode being an electrode into which a high frequency electric current based on the power for plasma excitation flows after passing through a plasma space;
wherein the chamber wall of the chamber and the susceptor electrode are AC shorted to each other [Plasma treatment equipment in which a chamber wall and a susceptor electrode having the same DC potential are AC shorted to each other].

5. (Amended) The plasma treatment equipment according to claim [3] 4, wherein the said metal plate is inclined with respect to the bottom wall, and an angle formed between said metal plate and the bottom wall is less than 45 degrees.

13. (Amended) A plasma treatment equipment having a chamber for performing plasma treatment, the plasma treatment equipment comprising:
a plasma excitation electrode to which a power for plasma excitation is supplied, the plasma excitation electrode being provided in the chamber;
a susceptor electrode that is opposed to the plasma excitation electrode provided in the chamber; and

an electrode shield of the susceptor electrode provided in the chamber,
wherein at least one of the susceptor electrode and the electrode shield
thereof has the same DC potential as that of a chamber wall of the chamber,
the susceptor electrode being an electrode into which a high frequency
electric current based on the power for plasma excitation flows after passing through
a plasma space, and

the chamber wall of the chamber and at least one of the susceptor electrode
and the electrode shield thereof are AC shorted to each other.

14. (Amended) The plasma treatment equipment according to claim 13,
wherein the electrode shield of the susceptor electrode has the same DC potential
as that of the chamber wall of the chamber, and the chamber wall of the chamber
and the electrode shield of the susceptor electrode are AC shorted to each other.

15. (Previously Presented) The plasma treatment equipment according
to claim 14, wherein said chamber wall and said electrode shield are shorted to each
other at a location that is within a distance shorter than 500 mm from a side wall of
the chamber wall.

16. (Previously Presented) The plasma treatment equipment according
to claim 15, wherein said electrode shield is shorted to said chamber wall at a short
point on a bottom wall of the chamber wall, said short point being located within a
distance shorter than 500 mm from a side wall of the chamber wall as measured
along the bottom wall.

17. (Previously Presented) The plasma treatment equipment according
to claim 14, wherein said chamber wall and said electrode shield are shorted at a
plurality of short points.

18. (Previously Presented) The plasma treatment equipment according to claim 17, wherein the plurality of short points are disposed approximately symmetrically with respect to a center of said electrode shield.

19. (Previously Presented) The plasma treatment equipment according to claim 14, wherein said electrode shield is shorted to a side wall of the chamber wall.

20. (Previously Presented) The plasma treatment equipment according to claim 16, wherein said electrode shield is shorted to said chamber wall by a metal plate, said metal plate being connected between the short point on the bottom wall and a second short point on the electrode shield.

21. (Previously Presented) The plasma treatment equipment according to claim 20, wherein said metal plate is inclined with respect to the bottom wall, and an angle formed between said metal plate and the bottom wall is less than 45 degrees.

22. (Previously Presented) The plasma treatment equipment according to claim 13, wherein the at least one of the electrode and the electrode shield being at the same DC potential as the chamber wall is the electrode, the electrode being shorted to the chamber wall by a metal plate.

23. (Amended) A plasma treatment equipment having a chamber for performing plasma treatment, the plasma treatment equipment comprising:
a plasma excitation electrode to which power for plasma excitation is supplied, the plasma excitation electrode being provided in the chamber;

a susceptor electrode that is opposed to the plasma excitation electrode provided in the chamber; and

an electrode shield of the susceptor electrode provided in the chamber, the electrode shield disposed adjacent to the susceptor electrode,

wherein at least one of the susceptor electrode and the electrode shield thereof has the same DC potential as that of a chamber wall of the chamber,

the susceptor electrode being an electrode into which a high frequency electric current based on the power of plasma excitation flows after passing through a plasma space, and

the chamber wall of the chamber and at least one of the susceptor electrode and the electrode shield thereof are AC shorted to each other.